

ANDREYEV, V.N., kand.med.nauk

Treatment of hypertension with Rauwolfia serpentina preparations.
Vrach. delo no. 3:61-63 Mr '61. (MIRA 14:4)

1. Kafedra fakul'tetskoy terapii (zav. - prof. S.F. Oleynik)
L'vovskogo meditsinskogo instituta.
(HYPERTENSION) (RAUWOLFIA)

ANDREYEV, V.N.

Material on the problem of localization of internal inhibition.
Zhur.vys.nerv. deiat. 11 no.2:306-311 Mr-Apr '61. (MIRA 14:6)

1. Laboratory of Physiology and Pathology of Higher Nervous Activity
Pavlov Institute of Physiology, U.S.S.R. Academy of Sciences, Leningrad.
(CONDITIONED RESPONSE)

ANDREYEV, V.N., kand.med.nauk

Changes in the function of blood depots in hypertension under
the influence of hospital treatment. Nauch.trudy L'vov.obl.
terap.ob-va no.1:201-206 '61. (MIRA 16:5)

1. Kafedra fakul'tetskoy terapii L'vovskogo meditsinskogo instituta
(zav. kafedroy - prof. S.F. Oleynik).
(HYPERTENSION) (BLOOD--CIRCULATION)

ANDREYEV, V.N., kand.med.nauk

Compound treatment in hypertension with derivatives of isoquinoline, purine, barbituric acid, and other hypotensive substances. Nauch. trudy L'vov.obl.terap.ob-va no.1:268-270 '61. (MIRA 16:5)

1. Kafedra fakul'tetskoy terapii lechebnogo fakul'teta L'vovskogo meditsinskogo instituta (zav. kafedroy - prof. S.F. Oleynik).
(HYPERTENSION) (ISOQUINOLINE) (PURINES) (BARBITURIC ACID)

ANDREYEV, V. N.

35218. Ekologicheskie Issledovaniya Stelyushchikh Form Drevesnykh Porod. Nauch. Zapiski Moldav. Nauch. - Issled. Bazy Akad. Nauk SSSR, T. 11, 1949, s. 91-161. - Bibliogr: 16 nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 48, Moskva, 1949

b.1889

Moldavian

ANDREYEV, V. N.

Gidrolakkolity (Bylgunnyakhi) Zapadnosibirskikh Tundrakh. "Hydrolaccolite" in the West Siberian Tundras." Iz. Gos. Georg. Obsh., Vol. 68, No. 2, 1936.

SO: Trudy Arkitcheskogo Nauchno-Issledovatel'skogo Instituta, GUSMP, Council of Ministers, Vol. 201, 1948

ANDREYEV, V. N.

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ANDREYEV, V. N. Issledovaniye Rastitel'nosti Aerovizurl' Nyym
melodam. Trudy Vtorogo. geogr. S'yezda. T. Sh. M., 1949, s. 168-78
— Bibliogr: 16 Nazv.

SO: Lotopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949

ANDREYEV, V.N.; GALKINA, Ye.A.; IGOSHINA, K.N.; LAVRENKO, Ye.M.; RODIN, L.Ye.,
SALHOKIA, M.F.; SEMENOVA-TYAN-SHANSKAYA, A.M.; SOCHAYA, V.B.; SHIF-
YERS, Ye.V.; PEVZNER, R.S., tekhnicheskij redaktor

[Vegetation map of European U.S.S.R. on a scale of 1:2,500,000;
explanatory text] Karta rastitel'nosti Evropeiskoi chasti SSSR.
m. 1:2,500,000. Poiasnitel'nyi tekst. Sost. V.M.Andreev i dr.
Pod red. E.M.Lavrenko i V.B.Sochavy. Moskva, 1950. 288 p.
(MLRA 10:7)

1. Akademiya nauk SSSR. Botanicheskiy institut.
(Phytogeography)

1. ANDREYEV, V. N.
2. USSR (600)
4. Photography, Aerial
7. Use of airplanes for geobotanical mapping and for a survey of grazing lands.
Bot. zhur. 37 no. 6: 1952

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified.

ANDREYEV, V. K.

Lichens

Growth of Lichens on lushes. Dokl. AN SSSR, 85, no. 4, 1951.

Monthly List of Russian Accessions, Library of Congress November 1951. Unclassified.

ANDREYEV, Vladimir Nikolayevich

Inst of Polar Land Husbandry, Academic degree of Doctor of Biological Sciences, based on his defense, 17 December 1954, in the Council of the Botanical Inst imeni Komarov Acad Sci USSR of his dissertation entitled: "Vegetation on the Surface of East-European Tundra and Measures for its Utilization and Conversion"

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 9, 16 April 55, Byulleten' MVO SSSR, No. 14, Jul 56, Moscow, pp 4-22, Uncl. JPRS/NY-429

ANDREYEV, V.N.

USSR/ Scientists - Geography

Card 1/1 Pub. 45 - 10/17

Authors : Andreev, V. N.

Title : Boris Nikolaevich Gorodkov

Periodical : Izv. AN SSSR. Ser. geog. 3, 87-90, May - Jun 1954

Abstract : The scientific activities of Boris Nikolaevich Gorodkov (1910-1953) are recalled on the occasion of the passing of the first anniversary of his death. Gorodkov was outstanding in geography and botany and his research work was devoted largely to the possibilities of developing vegetation in the northern regions in order to aid the economy of his country.

Institution:

Submitted:

ANDREYEV, V.N.

Increase of forage lichens and methods of controlling it. Trudy Bot.
inst. Ser.3 no.9:11-74 '54. (MLBA 8:4)
(Lichens)

ANDREYEV, V.N.

Spreading of woody vegetation into the tundra in connection with the protection afforded by afforestation in the North. Bot.zhur. 39 no.1:28-47 Ja-F '54. (MLRA 7:3)

1. Nauchno-issledovatel'skiy institut polyarnogo zemledeliya zhivotnovodstva i promyslovogo khozyaystva, Leningrad.
(Windbreaks, shelterbelts, etc.) (Tundras)

ANDREYEV, V.N.

Interpretation of aerial photographs of different tundra types and
their aerial visual characteristics of frost fracturing. Geog.sbor.
no.7:103-120 '55. (MLRA 9:1)

(Tundras) (Photography, Aerial)

А.И. Лавренко
LAVRENKO, Ye.M.; ANDREYEV, V.N.; LEONT'YEV, V.L. [deceased]

Profile of the productivity of natural above-ground vegetation
of the U.S.S.R. from the tundras to the deserts. Bot.zhur.40
no.3:415-419 My-Je '55. (MLRA 8:10)

1. Botanicheskiy institut imeni V.L.Komarova Akademii nauk SSSR,
Leningrad
(Botany--Ecology) (Phytogeography)

KOREV, Gavriil Ivanovich; ANDREYEV, V.N., doktor biologicheskikh nauk,
redaktor; VOROB'YEV, F.I., redaktor; CHUNAYEVA, Z.V., tekhnicheskii
redaktor

[Fodder and pasture for northern reindeer] Korma i pastbishcha
severnogo olenia. Pod red. V.N.Andreeva. Moskva, Gos. izd-vo
selkhoz. lit-ry, 1956. 98 p. (MLRA 9:12)
(Reindeer)

ANDREYEV, V.N.

Recent afforestation of the tundra. Rast.Krain.Sev.SSSR
i ee osv. no.1:27-45 '56. (MIRA 10:2)

1. Nauchno-issledovatel'skiy institut polyarnogo zemledeliya,
zhivotnovodstva i promyslovogo khozyaystva.
(Russia, Northern--Afforestation)
(Tundras)

COUNTRY : USSR
SUBJECT : Reindeer Cultivation.
ABST. JOUR.: Ref Zhur-Biologiya, 1959, No. 1536
Author : Andreyev, V.N.
INST. : Sci. Res. Inst. of Agriculture in the Extreme North
TITLE : The Regeneration of Damaged Reindeer Moss
Grazing Areas, an Important Forage Base for
Reindeer Raising.
ORIG. PUB.: Byul. nauchno-tekhn. inform. N.-i. in-t s.kh.
Krayn. Severa, 1957, No. 3, 3-4
ABSTRACT : No abstract

CARD : 1/1

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7

ANDREYEV, V.N.; VAKHTINA, T.V.

Effect of climate near the ground on the phenology of plants in
subarctic regions. Priroda 48 no.6:96-97 Ja '59.

(MIRA 12:5)

1. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva Kraynego
Severa, Noril'sk.

(Arctic regions--Botany)

ANDREYEV, V.N. and SAVKINA, E.P.

"Reindeer Pastures and Meadows of the Far North of the USSR and
Some Problems of their Improvement and Utilization."

Scientific Research Institute for Agriculture of the Far North, Leningrad.
report to be presented at the 8th Intl Grassland Congress, Reading, England, 11-21 Jul '60.

Shchegolev, V.M.

Studying the populations and migration routes of reindeer by the
use of airplanes. Zool. zhur. 40 no. 1:117-121 Ja '61.

(HWA 14:2)

1. Research Institute of Agriculture of the Far North, Korylsk.
(Department of Reindeer) (Aeronautics in wildlife census)
(Aerial migration)

ANDREYEV, V.N.

Scientific and practical recommendations on the production of
venison. Probl. Sev. no.6:229-233 '62. (MIRA 16:8)

1. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva
Kraynego Severa Ministerstva sel'skogo khozyaystva RSFSR.
(Russia, Northern--Deer)

ANDREYEV, V.N.

Moldavian fossil pine and the pines of the group *Halajensis* s. l.
Trudy Od. un. 152. Ser. geol. i geog. nauk no. 9:148-160 1962.
(MIRA 17:5)

ALEKSANDROVA, V.D.; ANDREYEV, V.M.; VAKHINA, T.V.; DYDINA, R.A.; KANEV, G.I.
PETROVSKIY, V.V.; SHAMURIN, V.F.

[Forage characteristics of the plants of the Far North] Hermovaia
kharakteristika Krainego Severa. Moskva, Nauka, 1964. 483 p.
(Rastitel'nost' Krainego Severa SSSR i ee primeneniye, no.5).
(MIRA 18:1)

ANDREYEV, Vladimir Nikolayevich

ANDREYEV, Vladimir Nikolayevich; KUL'TIASOV, M.V., otvetstvennyy red.;
MUSATOVA, A.Ya., red.izd-va; MOSKVICHEVA, N.I., tekhn.red.

[Trees and shrubs of Moldavia] Derev'ia i kustarniki Moldavii.
Moskva, Izd-vo Akad.nauk SSSR. No.1. [Gymnospermae, and angio-
spermae ranging from the willow to the goosefoot family]
Golosemennye, pokrytosemennye semeistva ivovye-marevye. 1957.
207 p. (MIRA 11:1)

(Moldavia--Botany) (Trees) (Shrubs)

b.1989 -
Moldavian

ANDREYEV, V.N.; VAYNBAUM, S.Ya.; POLYANOV, V.A.; SAMAROV, S.V.;
TRUSHKIN, P.G.; KHAYKIN, I.G.

Structure of the eastern sector of the Zhiguli swell in
connection with oil prospects. Geol. nefti i gaza 7 no.12:
6-12 D '63. (MIRA 17:8)

1. Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy
promyshlennosti.

ANDREYEV, Vladimir Petrovich [deceased]; SAMININ, Yuriy Alekseyevich;
KOVCHIN, S.A., kand. tekhn. nauk, red.; ZHITNIKOVA, O.S.,
tekhn. red.

[Principles of electric drives] Osnovy elektropriroda. Izd.2.
perer. Moskva, Gosenergoizdat, 1963. 771 p. (MIRA 17:1)
(Electric driving) (Electric motors)

ROZEMBERG, O.O.; ANDREYEV, V.P.; ANTOSHIN, I.I.

Electric slag welding of turbine penstock at the Bratsk
Hydroelectric Power Station. Avtom.svar. 13 no.7:91-92
Jl '60. (MIRA 13:7)
(Bratsk Hydroelectric Power Station--Hydraulic turbines)
(Electric welding)

ANDREYEV, V.P.; BUTKOVSKIY, N.I.; KOMAROV, I.A.; KUDINOV, V.S.;
MASHANSKIY, G.S.; MERKIN, R.M.; MERKULOV, V.A.;
ZEMLYANIKIN, S.A.; SOLOMIN, V.V.; SHOLOKHOV, Ye.I.;
PEREPELITSKAYA, A.G., red.; AVDEYEVA, V.A., tekhn. red.

[Toward the new achievements; the Russian Federation in
1963, concise handbook] K novym rubezham; Rossiiskaia
Federatsiia v 1963. godu. Kratkii spravochnik. Moskva,
Sovetskaia Rossiia, 1963. 284 p. (MIRA 16:10)
(Russia--Economic policy--Handbooks, manuals, etc.)

ANDREYEV, V.F.; VOINOV, V.P.

Friction welding machine. Avtom. svar. 17 no.10:84-85 6 162
(NIRA 18:1)

ANDREYEV, Vladimir Nikolayevich(1889-1962), prof. doktor biol.
nauk; PANIN, V., red.; BALABAN, M., red.

[Trees and shrubs of Moldavia] Derev'ia i kustarniki
Moldavii. Kishinev, Kartia moldoveniaske. No.2. 1964.
275 p. (MIRA 18:4)

ANDREYEV, V. P. (Dotsent)

Shizofrenicheskiye Kartiny Psikhozov Pri Malyarii P. 204
Aktual'n. probl. nevropatol i psikhiiatrii. Kuybyshev, 1957

Iz kafedry psikhiiatrii Kazenskogo gosudarstvennogo meditsinskogo instituta,

Andreyev, V. P.

ANDREYEV, V.P.

Korsakoff's syndrome in malarial encephalitis. Zhur.nevr. i psikh.
Supplement:60 '57. (MIRA 11:1)

1. Kafedra psikiatrii (zav. - prof. M.P.Andreyev) Kazanskogo
meditsinskogo instituta.
(PSYCHOSES) (ENCEPHALITIS)

ANDREYEV, V.P., dotsent (Kazan')

Tikhon Ivanovich Iudin, Kaz.med.zhur. 40 no.6:106-107 N-D '59.

(MIRA 13:5)

(YUDIN, TIKHON IVANOVICH, 1879-1949)

ANDREYEV, V.P. dotsent

Tatar A.S.S.R. Society of Neuropathologists and Psychiatrists.
Kaz. med. zhur. no. 4:86-87 J1-Ag '60. (MIRA 13:8)
(TATAR A.S.S.R.—PSYCHIATRY)

ANDREYEV, V.P.

Schizophrenic picture of psychoses with manifestations of
schizophasia in brain trauma. Zhur. nerv. i psikh. 60
no. 12:1649-1653 '60. (MIRA 14:4)

1. Kafedra psikhiatrii (zav. - prof. M.P. Andreyev) Kazanskogo
meditsinskogo instituta.

(BRAIN--WOUNDS AND INJURIES) (SCHIZOPHRENIA)

ROMANOV, Yu.D., kand.med. nauk; ZYABBAROV, A.A., kand.med. nauk; HUSETSKIY,
I.I., prof.; ANDREYEV, V.P., dotsent

In the scientific medical societies of the Tatar A.S.S.R.
Kaz.med. zhur. 4:94-97 J1-Ag'63 (MIRA 17:2)

1. Sekretar' Obshchestva terapevtov Tatarskoy ASSR (for Romanov). 2. Sekretar' Obshchestva rentgenologov i radiologov Tatarskoy ASSR (for Zyabbarov). 3. Predsedatel' Obshchestva nevropatologov i psikhiatrov Tatarskoy ASSR (for Rusetskiy). 4. Sekretar' Obshchestva nevropatologov i psikhiatrov Tatarskoy ASSR (for Andreyev).

RUSETSKIY, I.I., prof., glav. red.; ANDREYEV, M.P., prof., zam.
glav. red.; OMOROKOV, L.I., prof., red.; ANDREYEV, V.P.,
dots., red.; MENDELEVICH, D.P., red.; GRINBERG, S.A.,
red.

[Some problems of neuropathology and psychiatry; materials
of the scientific and practical conference of neuropa-
thologists and psychiatrists of the city of Kazan] Nekoto-
rye voprosy nevropatologii i psikhatrii; materialy nauchno-
prakticheskoi konferentsii nevropatologov i psikhiatrov gor
Kazani. Kazan', Kazanskoe nauchn. ob-vo nevropatologov i
psikhiatrov, 1963. 77 p. (MIRA 16:11)

(NERVOUS SYSTEM--DISEASES) (PSYCHIATRY)

ANDREYEV, V.R., inzh.

Adjustment of the PZ-157 remote protection. Elek. sta. 30
no.3:76-78 Mr '59. (MIRA 12:5)
(Electric networks)

S/196/61/000/009/028/052
E194/E155

AUTHORS: Bertinov, A.I., and Andreyev, V.R.

TITLE: The influence of steady-state and transient processes
on the waveshape of field and voltage of
magneto-electric generators

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika,
no.9, 1961, 22, abstract 9I 153. (Tr. Mosk. aviats.
in-ta, no.133, 1961, 41-54)

TEXT: Results are given of an investigation of the influence
of different kinds of demagnetisation of magnets on the waveshape
of the field in the air gap. With stabilisation by opening the
magnetic circuit the waveshape of the field is quite different from
that with stabilisation by short-circuit current. In the latter
case demagnetisation of the magnet is not uniform because of the
presence of a transverse component in the m.m.f. curve. The
greatest distortion occurs during stabilisation by direct current
and by instantaneous short-circuit current. The generator
voltage curve at no-load and on-load remains practically

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The influence of steady-state ...

S/196/61/000/009/028/052
E194/E155

sinusoidal, despite considerable distortion of the field
waveshape. This arises from the use of distributed armature
windings of shortened pitch, skewed armature slots and cast
aluminium damper windings on the rotor.

[Abstractor's note: Complete translation.]

Card 2/2

ANDREYEV, V. S. Engr

"The Resistance to Corrosion Fatigue of the Steels Used in the Petroleum Industries Along the Volga." Cand Tech Sci, Central Sci-Res Inst of Technology and Machine Building, 7 February 1955. (VM, 28 Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: Sum. No. 556, 24 Jun 55

SOV/137-59-1-1947

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 257 (USSR)

AUTHOR: Andreyev, V. S.

TITLE: On the Effect of Corrosion on the Mechanical Properties of Steel
(O vliyanii korrozii na mekhanicheskiye svoystva stali)

PERIODICAL: Sb. nauchn. tr. Kuybyshevsk. industr. in-ta. Mekhanika, 1958,
Nr 7, pp 191-194

ABSTRACT: Experimental data are adduced on the effect of antecedent corrosive action (corrosion prior to testing) with water freshly pumped from an aquifer on the mechanical properties of St-40 and 20KhN rod steels. Immersion of specimens for 1, 2, 10, and 20 days did not bring about any changes in the σ_b of St-20KhN steel or the σ_T of St-40 steel; σ_b of St-40 steel decreased by 5%. Exposure for 2, 10, 20, and 60 days to ordinary atmospheric conditions brought about a decrease in the fatigue limit of 20KhN steel by 9.5% and of St-40 steel by 25%. As a result of corrosion-fatigue tests (in the same water medium) with St-40 steel specimens which had been exposed prior to the test, a 13% decrease in the corrosion fatigue limit was obtained on the basis of $5 \cdot 10^6$ cycles. On the basis of

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SOV/137-59-1-1947

On the Effect of Corrosion on the Mechanical Properties of Steel

the data obtained application of safety load factor ($K=1.35-1.15$), which takes into account the previous corrosion action, is recommended for the steels tested.

Yu. K

Card 2/2

ANDREYEV, Vitaliy Semenovich; GUREYEV, Petr Antonovich; YEVSTIGNEYEVA, L.A.,
red.; TIMOFEYeva, N.V., tekhn. red.

[Organized recruitment of workers in the U.S.S.R.] Organizovannyi
nabor rabochikh v SSSR. Moskva, Gos.izd-vo iurid.lit-ry, 1960.
78 p. (MIRA 14:6)

(Contract labor)

9,4370

18 8100

1413, 1530, 1496

26453

S/115/61/000/007/004/004

E073/E535

AUTHORS: Andreyev, V. S., Mazurov, M.Ye. and Prudnikov, I.N.

TITLE: Application of the Hall effect for investigating the properties of cores of ferromagnetic materials

PERIODICAL: Izmeritel'naya tekhnika, 1961, No.7, pp.36-37

TEXT: Various authors have suggested using the Hall effect for recording the dynamic magnetization curve of ferromagnetics. However, the Hall constant of the used ferromagnetic materials was too low to achieve a satisfactory sensitivity. The authors propose using special semiconductor Hall pick-ups for investigating the magnetic characteristics of closed specimens and of specimens with air gaps. A sketch, Fig.1, is reproduced showing an arrangement for specimens with air gaps in which the output from the Hall pick-up is fed to an oscillograph. In such circuits the reluctance of the magnetic circuit without the air gap must be much higher than the reluctance of the air gap. A sketch, Fig.2, is also shown of a circuit for investigating specimens of simple geometrical shape in which a part of the magnetic circuit is made of material with a high permeability and high saturation

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Application of the Hall effect ...

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S/115/61/000/007/004/004
E073/E535

induction, whilst another part 2 is of a simple shape and is formed by the specimen under investigation. To reduce the air gap to a minimum, the author recommends using pick-ups in the form of thin films. The various sources of error are briefly enumerated, mentioning that they have been dealt with in greater detail in another paper of the authors (Ref.6: Trudy uchebnykh institutov svyazi, 1961, No.1). By good design and satisfactory compensation the accuracy of this method can be increased to be comparable with the accuracy of instruments based on other principles. The method was applied for cores of various materials (transformer steel, permalloy and ferrites). Due to the extremely low inertia, Hall pick-ups can be used for determining the magnetization curve up to very high frequencies. By using low frequency generators and oscillographs, this method permits determining the characteristics of materials which are near to the static characteristic, for instance, curves recorded at a frequency of 15 c.p.s. differ from curves recorded with d.c. by only 1 to 2%. There are 2 figures and 6 references: all Soviet.

Card 2/3

ANDREYEV, V. S.

"Investigation of a Circuit for Regenerative Frequency Division." Sub 26 Oct 51,
Moscow Order of Lenin Power Engineering Inst.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55.

ANDREYEV, V. S.

USSR/Electronics

Card 1/1

Author : Andreyev, V. S.

Title : Operation of two-tube regenerative frequency dividers using multiplication

Periodical : Radiotekhnika 9, 39-54, Jan-Feb 1954

Abstract : A study of the operating characteristics of two-tube regenerative frequency divider with frequency multiplication. Relationships are derived suitable for calculations of steady-state conditions of frequency division. Causes of self-excitation are clarified, and conditions for self-excitation established for the resonance tuning of circuits. Results of experimental check using tubes 6L7 (mixer) and 6Zh4 (multiplier) are given. Credits Professor Yu. B. Kobzarev for valuable assistance. Six references: 4 USSR.

Submitted : December 17, 1952

AUTHOR: Andreyev, V. S.

108-12-2/10

TITLE: On the Operation of a Ring Transformer in the Case of
small Input Signals (O rabote kol'tsevogo
preobrazovatelya pri nebol'shikh vkhodnykh signalakh).

PERIODICAL: Radiotekhnika, 1957, Vol. 12, No. 12, pp. 10-18 (USSR)

ABSTRACT: The general scheme of a ring transformer with transformer
wiring circuit is investigated with approximation of the
characteristics of linear elements by a dependence on the
form

$$\sqrt{i} = \frac{1}{cR_0} (e^{cu} - 1)$$

$c = 3 \frac{1}{4}$ for germanium point-diodes, $R_0 = \frac{du}{di}$ at $u=0$.

The transformers are considered to be perfect, i.e. they
have no scattering and no losses. The characteristics of
the nonlinear elements are assumed to be identical, which
is attained in practice by suitable selection. First, the
transformer is investigated for the general case, and a

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On the Operation of a Ring Transformer in the Case of
small Input Signals

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system of equations which determines the characteristics of the modulator is derived. For the solution of this system of 4 transcendental equations with 4 unknowns the method developed by Newton-Rafson is used here. This method is employed for special cases in which one of the EMF (electromotive force) is considerably greater than the other. It is for just such conditions of operation that ring transformers are used. Two cases in which

$$e_I \gg e_{II} \quad \text{and} \quad e_{II} \gg e_I$$

are investigated. The relations, which determine the dependence of the output signal and the input resistances on the input signals and scheme parameters are derived. The following summary is made: The approximation of the characteristics of semiconductor rectifiers by means of exponential function makes it possible to investigate the ring transformer in the entire domain of the not large input signals if the activity takes place in the curved sections

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On the Operation of a Ring Transformer in the Case of
small Input Signals

108-12-2/10

of the rectifier characteristics. The characteristics of the scheme, and, above all, the dependence of the output signal on input signals, depend essentially on the ratio of the internal resistance of the sources, the load resistance, and the detector characteristics. If all these quantities are taken into account, the optimum conditions at which the output signal has its greatest efficiency or has the largest amplitude, can be determined. It is specially pointed out that with a certain ratio of the parameters in the scheme, nearly a pure multiplication of the input signals takes place. This is the case also if the highest value of the control signal is relatively great and is already outside the quadratic domain. There are 6 figures, and 6 references, 5 of which are Slavic.

SUBMITTED: October 24, 1956 (initially) and May 20, 1957 (after revision)

AVAILABLE: Library of Congress

Card 3/3

1. Transformers-Operation-Mathematics-Theory

ANDREYEV, V. S.

V.S. Andreyev, "Certain questions of the theory of duplex regenerative frequency dividers." Scientific Session Devoted to "Radio Day", May 1958, Trudrezervizdat, Moscow, 9 Sep 58.

Peculiarities and achievements of regenerative frequency dividers are analyzed in comparison with other types of frequency dividers of almost-sinusoidal oscillations. Analytic expression of the characteristics of a ring transformer and a possible shape of the characteristics are presented.

The stationary region of the regenerative frequency divider is investigated on the basis of an equation of the slowly varying amplitude. The character of the frequency and amplitude characteristics of the divider and the synchronization bands is determined.

AUTHOR: Andreyev, V.S.

109-3-2-8/26

TITLE: Investigation of the Steady State Operation of a Regenerative
One by Two Divider (Issledovaniye statsionarnogo rezhima
raboty regenerativnogo delitelya chastoty v dva raza)

PERIODICAL: Radiotekhnika i Elektronika, 1958, Vol.III, No.2,
pp. 214 - 226 (USSR).

ABSTRACT: One of the most often used regenerative frequency
dividers is the circuit with a ring-type frequency-changer.
Such a circuit is shown in Fig.1. The system operates as a
one-by-two divider and its resonance circuit is tuned to the
frequency approximately equal to half the frequency of the
input signal u_{Bx} . The most important element of the divider
is its ring-type frequency-changer. An attempt is made to
analyse its operation, i.e. to find the relationship between
its two input signals, u_{Bx} and u_{o6p} , and its output signal
 u_{Bbx} . The equivalent circuit of the frequency-changer is shown
in Fig.2. In the analysis, it is assumed that all the non-
linear elements (rectifiers) are identical and the transformers
are ideal. The input signals of the system, E_{Bx} and E_{o6p} ,
are sinusoidal, as defined by Eq.(1). It is shown that the

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Investigation of the Steady State Operation of a Regenerative One by Two Divider

output signal can be expressed by:

$$u_{BbX}(\omega) = \frac{2}{\pi} n_3 E'_{BX} \left[\cos(\omega t - \varphi) - \frac{1}{3} \cos(\omega t + 3\varphi) \right] \quad (9)$$

where n_3 is the turn ratio of the transformer T_{P3} of the circuit of Fig.2. It is shown that the operation of the system of Fig.1 can be described by Eqs.(14), (15) and (16). This system of equations can be reduced to Eqs.(18) and (19), where the coefficients σ , γ , d , ω_0^2 are defined by Eqs.(17) and (20), and $\tau = \omega t$. It is assumed that since u_k and u_{o6p} are almost sinusoidal, the solution of Eqs.(18) and (19) is in the form of Eqs.(21) where a_1 , a_2 , b_1 and b_2 as well as u_k , u_{o6p} , φ and ψ are slowly changing time functions. If $\sigma \approx 0$, the system of Fig.1 can be described by a single second order differential equation (see Eq.(23))

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Investigation of the Steady State Operation of a Regenerative One by Two Divider

By solving this equation, it is shown that in the steady state, the phase of the system is expressed by:

$$\varphi = \frac{1}{2} \arctg \left(\frac{1}{2} \operatorname{tg} \varphi_1 \right) \quad (29)$$

and the amplitude is given by:

$$U_{obp} = \frac{8}{3\pi} \frac{M}{L_1} S n_3 \frac{R_3}{\sqrt{1 + \left(\frac{2\Delta\omega}{\omega d_3} \right)^2}} \frac{1}{\sqrt{1 + 3 \cos^2 \varphi_1}} E'_{BX} \quad (32)$$

where $d_1 = \omega_0 L_2 / R_{obp}$, $\operatorname{tg} \varphi_1 = -\Delta\omega / \omega d_3$,

$R_3 = \omega_0 L_1 / d_3$ and S is the slope of the amplifier tube and d_3 is given by Eq.(24). Eq.(32) can be used to construct the response curve of the system. Such a curve is

shown in fig.6. If $\sigma \neq 0$, Eqs.(18) and (19) can be trans-

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Investigation of the Steady State Operation of a Regenerative One by Two Divider

formed by means of Eqs.(21) into a system of simplified equations expressed by Formulae (38). It is shown that in the steady state, the solution of this system leads to:

$$U_k = \frac{4}{3} A \frac{L_1}{M} \frac{1}{d_3 \sqrt{1 + 4 \left(\frac{2\Delta\omega_3}{\omega d_3} \right)^2}} \quad (44)$$

$$\text{tg } 2\varphi = \frac{d_3}{2} \frac{\omega}{2\Delta\omega_3} \quad (45)$$

where $\Delta\omega_3$ is defined by Eq.(43). The last two equations are employed to construct the response curves of the system (see Fig.7) and to evaluate the optimum coupling coefficient. It is concluded that the characteristics of a regenerative frequency divider with a ring frequency-changer are primarily

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Investigation of the Steady State Operation of a Regenerative One by
Two Divider

dependent on the type of the anode transformer. If the transformer contains a core, the system can be used at low frequencies, but it is necessary to include an additional resistance into the feedback path. The bandwidth of such a system is approximately twice the bandwidth of the resonant anode circuit.

When the transformer is without the core, the system produces sinusoidal output without any additional resistance in the feedback loop. It is also possible to choose the coupling coefficient in such a way that the resulting bandwidth of the system can be less than, equal to or larger than the bandwidth of the resonant anode circuit. There are 7 figures and 6 references, 5 of which are Russian and 1 English.

SUBMITTED: September 17, 1956

AVAILABLE: Library of Congress

Card 5/5 1. Instrumentation-Mathematical analysis

06533

SOV/142-2-2-9/25

9(2,3)
AUTHOR:

Andreyev, V.S.

TITLE:

The Theory of a Regenerative Frequency Divider

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika,
1959, Vol 2, Nr 2, pp 195-204 (USSR)

ABSTRACT:

In spite of the wide-spread application of different regenerative frequency dividers in measuring, radio engineering and communication equipment, the theory of their functioning is still insufficiently developed. Even for the most simple circuit, shown in figure 1, used for frequency halving, only the static operation conditions have been sufficiently considered, for the case, when the input voltage amplitude is several times smaller than the voltage amplitude fed to the other end of the ring-shaped converter over the feedback circuit. Such operating conditions require a special circuit element selection and their practical application is not too frequent. Using the method of slowly changing amplitudes, the author analyzes the principal characteristics of a frequency divider circuit: the

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SOV/106-59-4-3/13

AUTHORS: Andreyev, V.S. and Tseytlin, M.Z.

TITLE: Wide-band Frequency Dividers with a Changeover Switch in the Feedback Circuit (Shirokopolosnyye deliteli chastoty s pereklyuchatelem v tsepi obratnoy svyazi)

PERIODICAL: Elektrosvyaz', 1959, Nr 4, pp 23 - 35 (USSR)

ABSTRACT: The authors consider first the action of a frequency divider (Figure 1) which uses a ring modulator shunting the grid input of a valve, as developed by Fitzgerald (Ref 4) and modified by Korolev (Ref 5). If one of the difference combination frequencies from the modulator coincides with the feedback frequency, then the circuit will divide the input frequency an even number of times. The equivalent circuit (Figure 3), represented as a switch across the grid input which can change the shunting impedance from r_n (low value) to r_3 (high value), is analysed. The grid voltage is shown to be:

$$u = \alpha e - \beta e \vee (t) \quad (7)$$

where α and β are constants determined by the

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circuit parameters; $\nu(t)$ is a unit switching function, equal to +1 when the feedback voltage is positive and -1 when it is negative. If an amplifier with a high input impedance is used, then $R_i \ll R_{BX}$, $r_n \ll r_3$, $R_i \ll r_3$ (R_i and R_{BX} being as shown in Figure 3), and:

$$\alpha \approx \frac{1}{2} \cdot \frac{1 + 2 \frac{r_n}{R_i}}{1 + \frac{r_n}{R_i}}; \quad \beta \approx \frac{1}{2} \cdot \frac{1}{1 + \frac{r_n}{R_i}} \quad (8)$$

If R_i is less than r_n , the frequency divider becomes ineffective. In this case, the modulator must be connected in 'series' instead of in 'shunt' (Figure 4). Because the resistance r_n is comparable with the input

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SOV/106-59-4-3/13

Wide-band Frequency Dividers with a Change-over Switch in the Feedback Circuit

resistance of a semiconductor triode, the valve in Figure 1 cannot be replaced by a semiconductor triode without modification of the circuit. A suitably modified circuit using a second semiconductor triode instead of a ring modulator was developed and the circuit is given in Figure 5. In the experimental work it was found that the frequency was changed not only by an even number of times but also by an odd number. This can be due to a number of causes: non-linear amplification, difference in rectifier characteristics, etc. In the subsequent analysis, the amplifier is considered linear and the relationships which give even division are investigated. The relationships deduced show that:

- 1) the output amplitude of the frequency divider bears a linear relation to the input amplitude;
- 2) the greater the slope of the amplifier and the greater the modulation depth of the input signal, the greater will be the output voltage;
- 3) the secondary (feedback) circuit reduces the resonant

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SOV/106-59-4-3/13
Wide-band Frequency Dividers with a Change-over Switch in the
Feedback Circuit

frequency of the primary circuit;
4) except under certain specified conditions, the
frequency characteristics will be unsymmetrical.
The synchronisation bandwidth is investigated analytically
and found to depend on the coupling between the primary and
secondary circuit and on the Q of the secondary circuit.
The results are illustrated graphically. The results of
experimental investigation are given. There are 19 figures,
1 table and 7 references, 5 of which are Soviet and
2 English.

SUBMITTED: November 13, 1958

Card 4/4

ANDREYEV, V.S.; MAZUROV, M.Ye.; PRUDNIKOV, I.N.

Use of the Hall effect in frequency dividers. Elektrosviaz: 14
no.9:12-19 S '60. (MIRA 13:9)
(Frequency changers) (Hall effect)

26204

8/196/60/000/002/005/009

A055/A133

9.6000 (1139, 1331)

AUTHORS: Andreyev, V. S., Soshnikov, E. M.

TITLE: Low-frequency divider.

PERIODICAL: 'Elektrosvyaz', no. 2, 1960, 32 - 37

TEXT: The authors describe a low-frequency divider with a transistor-switch in the feedback circuit and using a selective RC-amplifier with a double-T bridge as selective element. To the knowledge of the authors, only Schmidt (see English-language reference at the end of the abstract) has already treated this problem in the literature. Besides the selective RC-amplifier (tube 6X4 [6Zh4]) and the transistor-switch (014 [P14]), the divider contains an auxiliary amplifier (triode 6H15N [6N15P]). The resonance frequency of the selective amplifier is 250 cps; its equivalent Q is 40 at $E_a = 250$ v, and 60 at $E_a = 300$ v. The operation of the transistor-switch is analogous to that of two diodes connected towards each other (emitter-base and collector-base) and having low forward resistances (20 - 30 ohms) and high reverse resistances (above 0.5 meg); when the positive half-wave of the control voltage is active, both diodes are blocked and

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26204
3-10-40/006/002/005/009
A055/A.03

Low-frequency divider

remains stable when the supply voltage of the input signal varies within very wide limits. When, for instance, the actual supply voltage varies between 250 and 450 v, the synchronization time varies only by 10-15% under normal operating conditions of the divider. The increase of the actual supply voltage brings about an increase of the gain and selectivity of the selective amplifier. The output frequency range of the divider is determined by the frequency range of the selective amplifier, from 10 cycles to hundreds of kilocycles per second. There are 11 figures and 6 references: 5 Soviet-born and 1 non-Soviet-born. The reference to the English-language publication reads as follows: "Strumit, 'Frequency Divider with Phase-Shift Oscillator', E. Strumit, v. 28, VI, 1950.

SUBMITTED: November 7, 1959

X

Card 3/3

22106
S/106/61/000/001/002/008
A055/A033

6.7110 (1121, 1524)
Andreyev

6.
AUTHORS:

1, 1534)
Andreyev, V. S., Burdzeyko, B. P., and Vasil'yev, V. I.
frequency divider

TITLE:

Andreyev, V. S., Burdakov, V. I.
Regenerative low frequency divider
1, 1961, 9 - 15

PERIODICAL:

Regenerative low frequency
...yaz', no. 1, 1961, 9 - 15

TEXT:

AUTHORS: Andreyev, V.
 TITLE: Regenerative low frequency divider
 PERIODICAL: Elektrosvyaz', no. 1, 1961, 9 - 15
 TEXT: In the regenerative low frequency divider described in this article (see Figure 1), RC-amplifiers with double T-shaped bridges are used as selective elements. The new feature of this divider is the way in which the frequency multiplier circuit is connected. As shown in the diagram, the new frequency divider consists of a frequency converter (one half of the first tube), a frequency multiplier (second half of this tube) and two selective RC-amplifiers. In the usual two-tube regenerative frequency dividers, tuning and selectivity are ensured by the insertion of oscillating circuits in the anode circuits of the converter and of the multiplier. But if selective RC-amplifiers are used, it is not advisable to combine the selective device and the converter (or multiplier) into one single stage. To obtain sufficient selectivity and sensitivity, it proved necessary to introduce two separate selective RC-amplifiers. The amplifier following the converter is tuned to frequency f , and the amplifier follow-

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into one single stage. It is proved necessary to introduce a transformer following the converter is tuned.

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..., almost trapezoidal circuit, the duration and steepness of initial bias and by the amplitude of the input voltage. The multiplier's anode is connected a differentiating circuit, formed by a capacitor ($C = 300$ picofarads) and by the parallel-connected input resistance of the bridge and grid leakage resistors. The amplitude of the following tube. Short pulses appearing at the output of this circuit "push" (twice within a period of the low frequency signal) the oscillations generated in the

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R000101520015-6

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Regenerative low frequency divider

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105/01/000/001/002/002
A055/A033

amplifier tuned to frequency $(n - 1) f$. In the intervals between the pulses, the oscillations are damped. The pulses must be sufficiently short and strong, whereas the interval T_1 between negative and positive impulses should be accurately determined in order to ensure the action of the pulses at the moments when the greatest positive or negative $(n - 1) f$ -frequency voltages appear at the amplifier grid. T_1 can be controlled by varying the initial bias or the parameters R_g and C_g of the multiplier grid circuit. Comparing graphs b, c and d of figure 3, we see that the optimum conditions for a division by an even number are obtained when $T_1 = T/2$, whereas division by an odd number is impossible. The setup of figure 1 was analyzed for $n = 5, 10$ and 20 , which required a frequency multiplication by $4, 9$ and 19 respectively. The synchronization band reached $17, 7.3$ and 9.3% respectively for $n = 5, 10$ and 20 . The amplitude characteristics (U_{outp}/U_{inp}) and the frequency response of the divider are given (for $n = 5$ and $n = 20$) as well as a short analysis of the circuits. The output range of the divider extends from several times 10 kc to 10 cycles, and even below. Sensitivity and stability of the divider are quite satisfactory. The synchronization band for great values of n is wider than that of any other existing frequency divider. There are 10 figures, 1 table and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc. The reference to English language publication reads as

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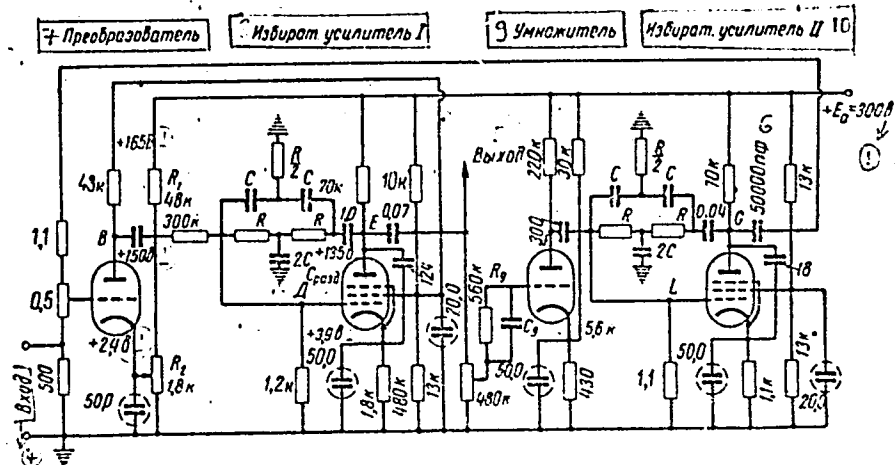
Regenerative low frequency divider

22206
S/106/61/000/001/002/008
A055/A033

follows: Schmidt, "Frequency division with phase-shift oscillators"; Electronics, v. 23, VI, 1950. X

SUBMITTED: April 29, 1960

Figure 1:



S/194/62/000/006/209/252
D271/D308

AUTHORS: Andreyev, V.S., and Artamonov, M.M.

TITLE: Transistorized key divider for low frequencies

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 6, 1962, abstract 6-7-217 y (V sb. Poluprovodnik. pribory i ikh primeneniye, no. 7, M. Sov. radio, 1961, 296-311)

TEXT: The authors consider design features and results of an experimental investigation of a transistorized key divider which includes a selective RC amplifier with a double T-bridge. The following conclusions are reached: 1) The circuit permits a stable division of harmonic oscillations by any integer up to 15-20; the lowest output frequency is of the order of 10 c/s; this is determined by the possibilities of the given circuit of the selective amplifier. 2) The key divider is stable when the supply voltage varies between 3 and 15 V, and the ambient temperature - between 18° and 60°C; consumed power is 45 mW which is 100 times less than in the electron tube variant of the circuit. 3) As in all key dividers, Card 1/2

S/108/61/016/001/002/007
B010/B077

9,2510 (2104, 1020, 1159)

AUTHOR: Andreyev, V. S., Member of the Society

TITLE: A Circuit of a Selective RC-Amplifier

PERIODICAL: Radiotekhnika, 1961, Vol. 16, No. 1, pp. 18 - 25

TEXT: A difference amplifier gets selective if its anodes are interconnected by a Wien bridge and the bridge voltage is fed to the non-controlled grid. The selectivity of the circuit shown in Fig.1 comes about because a negative feedback voltage u_{MN} is fed from the bridge

center M to the grid of the second tube either over an auxiliary amplifier with an amplification k or directly ($k = 1$); this method cuts

down the amplification $\dot{V} = \frac{\dot{u}_2}{E}$ (E is the input voltage) of the difference amplifier. Only for $f_0 = \frac{1}{2\pi R_0 C_0}$ the potential of M with respect to mass is

zero, and this frequency is amplified fully (resonance frequency). Using the equivalent-circuit diagram shown in Fig.2 and applying Kirchhoff's

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A Circuit of a Selective RC-Amplifier

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B010/B077

laws, $\dot{\gamma}$ can be calculated as a function of the circuit parameters; if there is complete symmetry, one obtains

$$\dot{\gamma} = p \frac{R_a}{R} \left(1 + \frac{k}{2} \frac{R_a}{R_k} + i\xi \right) / \left[\frac{1}{2} \frac{kR_a + 4R_k}{R + 2R_k} + \left(\frac{1}{2} \frac{kR_a + 4R_k}{R + 2R_k} + kp \frac{R_a}{R} \right) i\xi \right] \quad (18),$$

with $p = \frac{\mu R_k}{R + 2R_k}$, $R = R_a + R_1$, (11) $\xi = \frac{1}{4} \left(\frac{\omega}{\omega_0} - \frac{\omega_0}{\omega} \right)$, $\omega_0 = \frac{1}{R_0 C_0}$; μ denotes the no-load amplification. If the equivalent-quality factor is defined by

$Q_e = \frac{\omega_0}{2\Delta\omega}$ ($\Delta\omega$ bandwidth for $\frac{1}{\sqrt{2}}$ decrease), the following relation will be obtained from (11) and (18) for the case $k=1$ (as shown in Fig.1):

$$Q_e = \frac{b_2}{4b_1} \quad (b_1 = \frac{1}{2} \frac{R_a + 4R_k}{R + 2R_k}, \quad b_2 = p \frac{R_a}{R}) \quad \text{or, if } R_k \gg R_a, \quad Q_e \approx \frac{\gamma_{res}}{4}, \quad \text{where}$$

$\gamma_{res} = \dot{\gamma}(\omega_0)$. From this, it follows that the quality factor for triodes ($\mu \approx 100$) with $R_a = 3R_1$ can be $Q_e < 10$. With $k > 1$ u_{MN} is fed k -fold to the

grid, and (11) and (18) yield $Q_e = \frac{b_1 + kb_2}{4b_1}$. For $k \rightarrow \infty$ $Q_{e \max}$ is

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A Circuit of a Selective RC-Amplifier

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approximately equal to $\frac{\mu}{2}$, i.e., the maximum quality factor is
 $Q_e = \frac{100}{2} = 50$. If the circuit is unsymmetrical, self-excitation can occur;

e.g., a difference ΔR_a between the plate resistances for $\Delta R_a > \frac{8 + \mu R_{a2}/R_k}{\mu - \mu R_{a2}/R_k} R_2$

leads to slightly distorted sinusoidal oscillations which can be synchronized in small interception ranges and allow a frequency division up to 1:10. Measurements agreed well with calculated values. With $R_a = 20$ kilohms, $R_o = 180$ kilohms, $R_k = 75$ kilohms, $C_o = 10$ nF, and a 6H1П (6N1P) tube, γ_{res} is equal to 8.0 and Q_e equal to 1.8. Fig. 4 illustrates the resonance curve of this circuit. There are 4 figures, 1 table, and 2 Soviet references.

SUBMITTED: January 8, 1960

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S/108/61/016/001/002/007
B010/B077

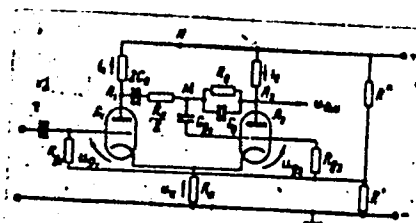


Рис. 1 (Fig. 1)

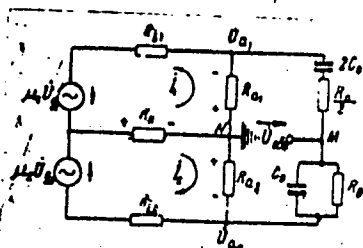


Рис. 2 (Fig. 2)

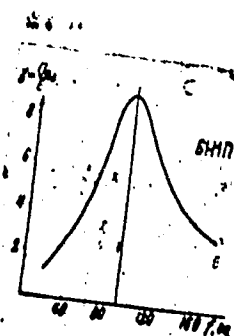


Рис. 4 (Fig. 4)

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ANDREYEV, V.S.

Key-type frequency divider. Radiotekhnika 16 no.9:60-67 S '61.
(MIRA 14:9)

1. Deystvitel'nyy chlen Nauchno-tehnicheskogo obshchestva
radiotekhniki i elektrosvyazi im. A.S. Popova.
(Frequency changers)

RYSAKOV, V.M.; ANDREYEV, V.S.

Experimental study of surface impedances in the band 1.5 to
10 Mc. Probl.dif.1 raspr. voln 2:212-218 '62. (MIRA 16:4)
(Radio waves) (Impedance (Electricity))

ANDREYEV, V.S.; MAZUROV, M.Ye.

Some causes for the appearance of parasitic phase modulation in
multistage frequency multipliers. Elektrosvaz' 17 no.4:10-19
Ap '63.

(MIRA 16:4)

(Frequency multipliers)

ANDREYEV, V.S.

Action of low-frequency interference on a multistage frequency multiplier. Elektrosviaz' 17 no.10:26-32 0 '63. (MIRA 17:1)

ANDREYEV, V.S.

Origination of phase modulation in AM amplifiers and modulators in class C operation. Radiotekhnika 18 no.12:19-21 D '63. (MIRA 17:1)

1. Deystvitel'nyye chlen Nauchno-tekhnicheskogo obshchestva radiotekhniki i elektrosvyazi imeni Popova.

TORUBAROV, Vladimir Alekseyevich; ANDREYEV, Vitaliy Sergeyevich;
BEZPROZVANNYY, Boris Semenovich; VATMAKHER, U.A., red.

[High-frequency noncontacting titration; transcription of
the lecture delivered at the Leningrad House for Scientific
and Technical Propaganda in September 1963] Vysokochastotnoe
beskontaktnoe titrovaniye; stenogramma lektsii, pročitannoi
v sentiabre 1963 g. Leningrad, 1964. 29 p. (MIRA 17:9)

1 2323-65 ENA(h)/ENT(1) Feb

ACCESSION NR: AP5003852

S/0106/65/000/001/0023/0031

AUTHOR: Andreyev, V. S.; Masurov, M. Ye.

TITLE: Experimental investigation of the causes of 1-f phase modulation in frequency multipliers [Report at the All-Union Conference of NTORIE, 9 May 63]

SOURCE: Elektronsvyaz, no. 1, 1965, 23-31

TOPIC TAGS: frequency multiplier, spurious phase modulation

ABSTRACT: Results are reported of an experimental investigation of the effect of various factors on the spurious 1-f (mostly a-f) phase modulation (PM) in electron-tube and transistorized frequency multipliers operating in class C; a single oscillatory circuit tuned to the output frequency serves as a load. These causes of the spurious PM are listed: (a) superimposed 1-f noise; (b) presence of spurious components at the input whose frequencies are close to the signal frequency or its harmonics; (c) presence of a spurious AM in the input signal.

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ACCESSION NR: AP5003852

(d) effect of the applied voltage on the collector-junction capacitance in transistors. These conclusions are drawn from the experimental data: (1) In electron-tube multipliers, the above spurious factors can be reduced by careful shielding, eliminating the supply-power ripple, operating the heaters on d-c, using high-Q circuits, employing a lower overall frequency-multiplication ratio; the spurious components should be attenuated by 80 db in order to keep the frequency deviation about 1 cps; (2) In transistor multipliers, apparently a compromise value of the circuit Q-factor should be used; recommended are: (a) the use of higher collector voltages; (b) the use of higher-frequency transistors with a small C_e ; (c) the use of top connection of the oscillatory circuit. Orig. art. has: 10 figures and 8 formulas.

ASSOCIATION: none

SUBMITTED: 28 May 64

ENCL: 00

SUB CODE: EC

NO REF SOV: 006

OTHER: 000

Cord 2/2

L 7934-56 EWT(1)/EWA(h)

ACC NR: AP5025646

SOURCE CODE: UR/0106/65/000/010/0038/0044

AUTHOR: Andreyev, V. S.; Leont'yev, A. G.

ORG: none

TITLE: Phase stability of harmonic frequency dividers 25

SOURCE: Elektrosvyaz', no. 10, 1965; 38-44

TOPIC TAGS: frequency divider, phase stability

ABSTRACT: The principal relations describing the operation of an electron-tube frequency divider (a sine-wave oscillator synchronized by a subharmonic of the external signal) show that any variation in the frequency or amplitude of the input signal or in the supply voltages results in a variation of the output phase of the divider. However, in the case of a regenerative frequency divider (a frequency converter, an amplifier, and a frequency-multiplier feedback), the attainable phase stability may be considerably higher; for small division ratios, the best

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UDC: 621.396.622.2:621.374.44

L 7934-66

ACC NR: AP5025646

phase stability is promised when a Hall generator is used as a converter. An experimental investigation of a 5 kc-to-1 kc electron-tube regenerative divider and a subharmonic-synchronized divider has corroborated the above theoretical conclusions. "V. G. Nosov took part in the experiments." Orig. art. has: 7 figures and 17 formulas.

SUB CODE: 09 / SUBM DATE: 07Oct64 / ORIG REF: 006


Card 2/2

ANDREYEV, V.S.

Experimentally produced autotetraploid form of love-in-a-mist
(*Nigella damascena* L.). Trudy MOIP. Otd.biol. 5:292-297 '62.
(MIRA 16:5)

1. Moskovskiy farmatsevticheskiy institut.
(LIVE-IN-A-MIST) (POLYPLOIDY)

ANDREYEV, V.S.

Some characteristics of experimental polyploid forms of *Papaver somniferum* L. Trudy MOIP. Otd.biol. 5:298-302 '62.

(MIRA 16:2)

1. Moskovskiy farmatsevticheskiy institut.
(POPPY BREKING) (POLYPLOIDY)

ANDREYEV, V.S.

Increase of morphine content in polyploids of *Papaver somniferum*
L. Dokl. AN SSSR 148 no.18206-209 Ja '63. (MIRA 16:2)

1. Institut biologicheskoy fiziki AN SSSR. Predstavleno akademikom
V.N. Sukachevym.
(POPPY) (MORPHINE) (POLYPLOIDY)

ANDREYEV, V.S.

Biogenesis of opium alkaloids. Bul. MOIP. Otd. biol. 68
no.4:106-117 J1-Ag '63. (MIRA 16:10)

KARASEV, K.Y., kand. khim.nauk; MAKOTINSKIY, M.P., kand. arkh.;
TIMOSHICHEV, V.M.; Prinimali uchastiye: LUTSIK, L.D.,
inzh.; FEDOROVA, G.M., tekhnik; LIVSHITS, A.M., inzh.;
ANDREYEV, V.S., retsenzant; MIRENSKIY, B.R., inzh.,
retsensent; GURVICH, E.A., red.izd-va; TEMKINA, Ye.L.,
tekhn. red.

[Catalog of finishing materials and products] Katalog ot-
delochnykh materialov i izdelii. Moskva, Gosstroizdat.
Pt.2. [Paints and lacquers] Kraski i laki. 1961. 76 p.
(MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh
stroitel'nykh materialov. 2. Chlen-korrespondent Akademii
stroitel'stva i arkhitektury SSSR (for Andreyev).
(Paint materials--Catalogs)

ALEKSEYEV, V.N., arkh.; KONSTANTINOVA, M.A., arkh.; LOPOVOK, L.I.,
kand. arkh.; MAKOTINSKIY, M.P., kand. arkh.; Prinsipali
uchastiye: BOGUSLAVSKIY, A.I., inzh.; LIVSHITS, A.M., inzh.;
MASHINA, N.N., inzh.; ANDREYEV, V.S., retsenzent; BOTVINKIN,
O.K., doktor khim, nauk, prof., retsenzent; POSOKHIN, M.V.,
retsenzent

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60 p. (MIRA 18:4)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut no-
vykh materialov. 2. Rukovoditel' Arkhitekturno-stroitel'nykh
sektorom Vsesoyuznogo nauchno-issledovatel'skogo instituta
novykh stroitel'nykh materialov, Moskva (for Makotinskiy).
3. Rukovoditel' Sektorom tekhniko-ekonomicheskikh issledovaniy
Vsesoyuznogo nauchno-issledovatel'skogo instituta novykh
stroitel'nykh materialov, Moskva (for Boguslavskiy). 4. Chlen-
korrespondent Akademii stroitel'stva i arkhitektury SSSR (for
Andreyev, Posokhin).

ANDREYEV, V.S.

Amount of wedging force of surface active media in submicrofissures
and its apparent manifestation. Fiz. met. i metalloved. 11
no. 1:132-137 Ja '61. (MIRA 14:2)

1. Kuybyshevskiy industrial'nyy institut im. V.V. Kuybysheva.
(Materials—Deterioration) (Surface chemistry)

ANDREYEV, V.S.; BELKIN, M.Ya.; TSEGEL'NITSKAYA, A.Yu.

Exchange of experience. Zav.lab. 27 no.8:1039-1040 '61.
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1. Kuybyshevskiy industrial'nyy institut imeni V.V.Kuybysheva
(for Andreyev). 2. Staro-Kramatorskiy mashinostroitel'nyy zavod
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(Testing machines)

ANDREYEV, V.S., gornyy inzh.

Nature of rock pressure manifestations during the working of a
medium thick, inclined layer in a permafrost zone. Nauch. trudy
MGI no.38:255-268 '61. (MIRA 15:10)

(Sangar region—Coal mines and mining—Cold weather operations)
(Rock pressure) (Frozen ground)

ANDREYEV, V.S., inzh.

Experience with constructing foundations for industrial buildings
and construction in soils which have been frozen for many years.
Prom. stroi. 39 no.3:55-57 '61. (MIRA 14'4)

1. Dal'stroyproyekt.
(Foundations) (Frozen ground)

MARMORSHTEYN, L.M.; ANDREYEV, V.S.

Measuring the induced polarization of rocks for studying their
reservoir properties using the UVP-NIIGA-1 unit. Trudy NIIGA
121:132-138 '62. (MIRA 15:9)
(Electronic instruments) (Oil sands--Permeability)

L 08958-57

ACC NR: AP6019726

SOURCE CODE: UR/0108/66/021/006/0072/0073

AUTHOR: Andreyev, V. S. (Active member of the society); Mazurov, M. Ye.
(Active member of the society) 20

ORG: Scientific and Technical Society of Radio Engineering and Electro-
communication im. A. S. Popov (Nauchno-tekhnicheskoye obshchestvo
radiotekhniki i elektrosvyazi)

TITLE: Reducing spurious AM in frequency multipliers

SOURCE: Radiotekhnika, v. 21, no. 6, 1966, 72-73

TOPIC TAGS: frequency ^{multiplication} multiplier, amplitude modulation

ABSTRACT: It is theoretically possible to attain infinite reduction of spurious AM
in frequency multipliers by using band-pass filters in their load circuits; the
passband should be located between the $(n-1)$ th and the $(n+1)$ th harmonics of the

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input signal; outside this band, the attenuation should rise abruptly to infinity. Practically, m-section compound electric filters, mechanical or quartz filters satisfy the above requirements. Oscillograms are shown which demonstrate that an electromechanical filter makes possible a 100-fold frequency multiplication in one stage without appreciable spurious AM. Orig. art. has: 2 figures and 5 formulas.

SUB CODE: 09 / SUBM DATE: 07Oct64

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Hydraulic blast hole stemming for dust control. bezop.truda v prom.
(MIRA 16:9)
7 no.7:22-23 J1 '63.

1. Rukovoditel' konstruktorskogo-tehnologicheskoy gruppy slakhty no.
3-ts kombinata Primorskugol' (for Andreyev). 2. Glavnyy inzh. slakhty
No.3-ts kombinata Primorskugol' (for Mel'nik).
(Maritime Territory--Coal mines and mining)